

We claim:

1. A method of delivering recombinant adeno-associated virus (rAAV) virions to a muscle, said method comprising:
 - 5 a) generating rAAV virions wherein said rAAV virions comprise a gene encoding an angiogenic factor and wherein said rAAV virions are free of wild-type AAV virions and helper-virus;
 - b) introducing said rAAV virions to the muscle of a mammal; and
 - 10 c) expressing said angiogenic factor wherein said expression of said angiogenic factor results in a therapeutic effect.
2. The method of claim 1, wherein said muscle is a skeletal muscle.
3. The method of claim 1, wherein said muscle is a cardiac muscle.
4. The method of claim 1, wherein said muscle is a smooth muscle.
5. The method of claim 1, wherein said angiogenic factor is selected from the group
15 consisting of fibroblast growth factor (FGF), angiopoietin-1, and vascular endothelial growth factor (VEGF).
6. The method of claim claim 1, wherein said angiogenic factor is VEGF.
7. The method of claim 6, wherein said VEGF is VEGF₁₆₅.
8. The method of claim 1, wherein said angiogenic factor is FGF.
- 20 9. The method of claim 1, wherein said angiogenic factor is angiopoietin-1.
10. The method of claim 1, wherein said therapeutic effect is a formation of new blood vessels to the muscle.
11. The method of claim 10, wherein said therapeutic effect is an increase in blood flow to the muscle.

muscle, wherein the angiogenic factor is expressed, and a therapeutic effect is achieved.

13. The method of claim 12, wherein the angiogenic factor is selected from the group consisting of fibroblast growth factor (FGF), angiopoietin-1, and vascular
5 endothelial growth factor (VEGF).

14. The method of claim 12, wherein said angiogenic factor is VEGF.

15. The method of claim 14, wherein said VEGF is VEGF₁₆₅.

16. The method of claim 12, wherein said angiogenic factor is FGF.

17. The method of claim 12, wherein said angiogenic factor is angiopoietin-1.

10 18. The method of claim 12, wherein the muscle is a skeletal muscle.

19. The method of claim 12, wherein the muscle is a cardiac muscle.

20. The method of claim 12, wherein the muscle is a smooth muscle.

21. The method of claim 12, wherein said therapeutic effect is a formation of new blood vessels.

15 22. The method of claim 12, wherein said therapeutic effect is an increase in blood flow.

23. The method of claim 12, wherein said rAAV virions are introduced via injection into a muscle.

20 24. The method of claim 12, wherein said rAAV virions are introduced via injection by a catheter into a blood vessel that supplies blood to the muscle.

25. The method of claim 12, wherein about 10^{10} to about 10^{15} rAAV virions are delivered.

26. The method of claim 12, wherein at least two angiogenic factor genes are delivered.

28. The method of claim 26, wherein a gene coding for VEGF and a gene coding for FGF-2 are delivered by said rAAV virions.
29. A method of delivering vascular endothelial growth factor to a muscle, said method comprising:
- 5 a) introducing at least one rAAV virion to the muscle wherein said rAAV virion comprises a gene coding for vascular endothelial growth factor; and
- b) expressing said vascular endothelial growth factor wherein expression results in a therapeutic effect.
30. The method of claim 29, wherein said muscle is a cardiac muscle.
- 10 31. The method of claim 29, wherein said muscle is a skeletal muscle.
32. The method of claim 29, wherein said muscle is a smooth muscle.
33. The method of claim 29, wherein said therapeutic effect is formation of new blood vessels.
34. The method of claim 29, wherein said therapeutic effect is an increase in blood flow.
- 15 35. A method of delivering vascular endothelial growth factor and fibroblast growth factor to a muscle, said method comprising:
- a) introducing at least one rAAV virion to the muscle wherein said rAAV virion comprises a gene coding for vascular endothelial growth factor and
- 20 a gene coding for fibroblast growth factor; and
- b) expressing said vascular endothelial growth factor and said fibroblast growth factor, wherein expression results in a therapeutic effect.
36. The method of claim 35, wherein said muscle is a cardiac muscle.
37. The method of claim 35, wherein said muscle is a skeletal muscle.

0800-0026
PATENT

40. The method of claim 35, wherein said therapeutic effect is an increase in blood flow.